SEQUENCE LISTING

<110> Ruan, Yijun
      Ng, Patrick
      Wei, Chialin

<120> Method for Gene Identification Signature (GIS) Analysis

<130> 3240-105

<140> 11/664,234
<141> 2003-09-17

<160> 29

<170> PatentIn version 3.3

<210> 1
<211> 33
<212> DNA
<213> Artificial

<220>
<223> oligonucleotide primer with homology to bacterial cloning vector

<220>
<221> misc_feature
<222> (1)..(33)
<223> n is a,c,g, or t

<220>
<221> misc_feature
<222> (1)..(33)
<223> v is a,c,g

<400> 1
gagctccttc tggagttttt ttttttttttt tvn   33

<210> 2
<211> 30
<212> DNA
<213> Artificial

<220>
<223> oligonucleotide primer with homology to bacterial cloning vector

<220>
<221> misc_feature
<222> (1)..(30)
<223> n is a,t,c or g

<400> 2

aattcgcggc cgcttggatc cgacnnnnnn   30

<210> 3
<211> 20
<212> DNA
<213> Artificial

<220>
<223> oligonucleotide primer with homology to bacterial cloning vector

<400> 3
gtcggatcca agcggccgcg   20

<210> 4
<211> 30
<212> DNA
<213> Artificial

<220>
<223> oligonucleotide primer with homology to bacterial cloning vector

<220>
<221> misc_feature
<222> (1)..(30)
<223> n is a,t,c or g

<400> 4
aattcgcggc cgcttggatc cgacgnnnnn   30

<210> 5
<211> 19
<212> DNA
<213> Artificial

<220>
<223> oligonucleotide primer with homology to bacterial cloning vector

<400> 5
tcgacccagg atccaactt   19

<210> 6
<211> 13
<212> DNA
<213> Artificial

<220>
<223> oligonucleotide primer with homology to bacterial cloning vector

<220>

```
<221>  misc_feature
<222>  (1)..(13)
<223>  phosporylation

<400>  6
gttggatcct ggg                                                        13


<210>  7
<211>  17
<212>  DNA
<213>  Artificial

<220>
<223>  oligonucleotide primer with homology to bacterial cloning vector

<400>  7
gtaaaacgac ggccagt                                                    17


<210>  8
<211>  19
<212>  DNA
<213>  Artificial

<220>
<223>  oligonucleotide primer with homology to bacterial cloning vector

<400>  8
ggaaacagct atgaccatg                                                  19


<210>  9
<211>  20
<212>  DNA
<213>  Artificial

<220>
<223>  oligonucleotide primer with homology to bacterial cloning vector

<400>  9
taatacgact cactataggg                                                 20


<210>  10
<211>  22
<212>  DNA
<213>  Artificial

<220>
<223>  oligonucleotide primer with homology to bacterial cloning vector

<400>  10
gatgtgctgc aaggcgatta ag                                              22
```

```
<210>  11
<211>  23
<212>  DNA
<213>  Artificial

<220>
<223>  oligonucleotide primer with homology to bacterial cloning vector

<400>  11
agcggataac aatttcacac agg                                               23


<210>  12
<211>  48
<212>  DNA
<213>  Artificial

<220>
<223>  Oligionucleotide with homolgy to a bacteria cloning vector


<220>
<221>  misc_feature
<222>  (1)..(48)
<223>  n is a,t,c or g

<400>  12
gatccgacnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnaagttg                    48


<210>  13
<211>  48
<212>  DNA
<213>  Artificial

<220>
<223>  Oligionucleotide with homolgy to a bacteria cloning vector


<220>
<221>  misc_feature
<222>  (1)..(48)
<223>  n is a,t,c or g

<400>  13
gatccaactt nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnngtcg                    48


<210>  14
<211>  29
<212>  DNA
<213>  Artificial

<220>
```

<223> Oligionucleotide primer with homolgy to a bacteria cloning vector

<220>
<221> misc_feature
<222> (1)..(29)
<223> phosphorylation

<400> 14
cgctctcctg taccgaccct gccgcttac   29

<210> 15
<211> 29
<212> DNA
<213> Artificial

<220>
<223> Oligionucleotide primer with homolgy to a bacteria cloning vector

<220>
<221> misc_feature
<222> (1)..(29)
<223> phosphorylation

<400> 15
aactatcgtc ttgagaccaa cccggtaag   29

<210> 16
<211> 24
<212> DNA
<213> Artificial

<220>
<223> Oligionucleotide adapter with homolgy to a bacteria cloning
      vector

<400> 16
aattctcgag cggccgcgat atcg   24

<210> 17
<211> 24
<212> DNA
<213> Artificial

<220>
<223> Oligionucleotide adapter with homolgy to a bacteria cloning
      vector

<220>
<221> misc_feature

5

<222> (1)..(24)
<223> phosphorylation

<400> 17
aattcgatat cgcggccgct cgag   24

<210> 18
<211> 3404
<212> DNA
<213> Artificial

<220>
<223> bacterial cloning vector

<400> 18
gggcgaattc tcgagcggcc gcggatccga cgagagcgcc tgcgtacggc tcgccgcggt   60

ggctggcgct acttcggagg agcccgacgc ggcgcggtcg tttttataca ttcccgcgcg   120

gaggcaacgg aagggcgggg cgcctcgtga ttaggccgcg gaggtcacag gctctgttgt   180

catgaaggtg aaaattaaat gttggaatgg tgtggccact tggctctggg tagccaatga   240

tgagaactgc ggcatctgca ggatggcgtt taatggctgc tgtccagact gtaaggtgcc   300

tggtgatgac tgccccctcg tgtggggaca gtgctcccac tgcttccaca tgcactgcat   360

cctcaagtgg ctgaatgcgc agcaggtgca gcagcactgc cccatgtgtc gccaggagtg   420

gaagttcaaa gagtgaagcc cgtgccgtgc cacttccctc tcctgtgctg tgccaggctc   480

agcccccttcc ctccctcccc tcccccagat acagcacccc aagtcccctc cacacagcac   540

agtggtgccc agagatctcg gtctgtgccg gggacaagga tgctttctgt ttggctggga   600

caaggttgaa aggagctttg ctgactgttt tgttttccca tcacattgac actttattca   660

ataagtaaaa ctcattacag ttccaagtcg gatcctgggt cgacctgcag gcatgcaagc   720

ttgagtattc tatagtgtca cctaaatagc ttggcgtaat catggtcata gctgtttcct   780

gtgtgaaatt gttatccgct cacaattcca cacaacatac gagccggaag cataaagtgt   840

aaagcctggg gtgcctaatg agtgagctaa ctcacattaa ttgcgttgcg ctcactgccc   900

gctttccagt cgggaaacct gtcgtgccag ctgcattaat gaatcggcca acgcgcgggg   960

agaggcggtt tgcgtattgg gcgctcttcc gcttcctcgc tcactgactc gctgcgctcg   1020

gtcgttcggc tgcggcgagc ggtatcagct cactcaaagg cggtaatacg ttatccaca   1080

gaatcagggg ataacgcagg aaagaacatg tgagcaaaag gccagcaaaa ggccaggaac   1140

cgtaaaaagg ccgcgttgct ggcgtttttc gataggctcc gcccccctga cgagcatcac   1200

6

```
aaaaatcgac gctcaagtca gaggtggcga aacccgacag gactataaag ataccaggcg   1260

tttccccctg gaagctccct cgtgcgctct cctgtaccga ccctgccgct taccggatac   1320

ctgtccgcct ttctcccttc gggaagcgtg gcgctttctc atagctcacg ctgtaggtat   1380

ctcagttcgg tgtaggtcgt tcgctccaag ctgggctgtg tgcacgaacc ccccgttcag   1440

cccgaccgct gcgccttatc cggtaactat cgtcttgaga ccaacccggt aagacacgac   1500

ttatcgccac tggcagcagc cactggtaac aggattagca gagcgaggta tgtaggcggt   1560

gctacagagt tcttgaagtg gtggcctaac tacggctaca ctagaaggac agtatttggt   1620

atctgcgctc tgctgaagcc agttaccttc ggaaaaagag ttggtagctc ttgatccggc   1680

aaacaaacca ccgctggtag cggtggtttt tttgtttgca agcagcagat tacgcgcaga   1740

aaaaaaggat ctcaagaaga tcctttgatc ttttctacgg ggtctgacgc tcagtggaac   1800

gaaaactcac gttaagggat tttggtcatg agattatcaa aaaggatctt cacctagatc   1860

cttttaaatt aaaaatgaag ttttaaatca atctaaagta tatatgagta aacttggtct   1920

gacagttacc aatgcttaat cagtgaggca cctatctcag cgatctgtct atttcgttca   1980

tccatagttg cctgactccc cgtcgtgtag ataactacga tacgggaggg cttaccatct   2040

ggccccagtg ctgcaatgat accgcgagac ccacgctcac cggctccaga tttatcagca   2100

ataaaccagc cagccggaag ggccgagcgc agaagtggtc ctgcaacttt atccgcctcc   2160

atccagtcta ttaattgttg ccgggaagct agagtaagta gttcgccagt taatagtttg   2220

cgcaacgttg ttggcattgc tacaggcatc gtggtgtcac gctcgtcgtt tggtatggct   2280

tcattcagct ccggttccca acgatcaagg cgagttacat gatcccccat gttgtgcaaa   2340

aaagcggtta gctccttcgg tcctccgatc gttgtcagaa gtaagttggc cgcagtgtta   2400

tcactcatgg ttatggcagc actgcataat tctcttactg tcatgccatc cgtaagatgc   2460

ttttctgtga ctggtgagta ctcaaccaag tcattctgag aatagtgtat gcggcgaccg   2520

agttgctctt gcccggcgtc aatacgggat aataccgcgc cacatagcag aactttaaaa   2580

gtgctcatca ttggaaaacg ttcttcgggg cgaaaactct caaggatctt accgctgttg   2640

agatccagtt cgatgtaacc cactcgtgca cccaactgat cttcagcatc ttttactttc   2700

accagcgttt ctgggtgagc aaaaacagga aggcaaaatg ccgcaaaaaa gggaataagg   2760

gcgacacgga aatgttgaat actcatactc ttcctttttc aatattattg aagcatttat   2820
```

7

```
cagggttatt gtctcatgag cggatacata tttgaatgta tttagaaaaa taaacaaata    2880

ggggttccgc gcacatttcc ccgaaaagtg ccacctgacg tctaagaaac cattattatc    2940

atgacattaa cctataaaaa taggcgtatc acgaggccct ttcgtctcgc gcgtttcggt    3000

gatgacggtg aaaacctctg acacatgcag ctccccggaga cggtcacagc ttgtctgtaa    3060

gcggatgccg ggagcagaca agcccgtcag ggcgcgtcag cgggtgttgg cgggtgtcgg    3120

ggctggctta actatgcggc atcagagcag attgtactga gagtgcacca tatgcggtgt    3180

gaaataccgc acagatgcgt aaggagaaaa taccgcatca ggcgccattc gccattcagg    3240

ctgcgcaact gttgggaagg gcgatcggtg cgggcctctt cgctattacg ccagctggcg    3300

aaagggggat gtgctgcaag gcgattaagt tgggtaacgc cagggttttc ccagtcacga    3360

cgttgtaaaa cgacggccag tgaattgtaa tacgactcac tata    3404
```

<210> 19
<211> 10
<212> DNA
<213> Artificial

<220>
<223> mammalian p53 consensus sequence

<220>
<221> misc_feature
<223> r is a purine (A or G)

<220>
<221> misc_feature
<223> w is A or T

<220>
<221> misc_feature
<223> y is a pyrimidine (C or T)

<400> 19
rrrcwwgyyy   10

<210> 20
<211> 20
<212> DNA
<213> Artificial

<220>
<223> mammalian p53 consensus sequence

<400> 20

```
gaacatgtcc caacatgttg                                                      20


<210>  21
<211>  20
<212>  DNA
<213>  Artificial

<220>
<223>  mammalian p53 consensus sequence

<400>  21
agacaagccc gggcaaggcc                                                      20


<210>  22
<211>  2770
<212>  DNA
<213>  Artificial

<220>
<223>  Bacterial Cloning Vector

<400>  22
gggcgaattc gatatcgcgg ccgcgaggag tatggatccg actcgagtcg gatcctggct         60

cctcgtcgac ctgcaggcat gcaagcttga gtattctata gtgtcaccta aatagcttgg        120

cgtaatcatg gtcatagctg tttcctgtgt gaaattgtta tccgctcaca attccacaca        180

acatacgagc cggaagcata aagtgtaaag cctggggtgc ctaatgagtg agctaactca        240

cattaattgc gttgcgctca ctgcccgctt tccagtcggg aaacctgtcg tgccagctgc        300

attaatgaat cggccaacgc gcggggagag gcggtttgcg tattgggcgc tcttccgctt        360

cctcgctcac tgactcgctg cgctcggtcg ttcggctgcg gcgagcggta tcagctcact        420

caaaggcggt aatacggtta tccacagaat caggggataa cgcaggaaag aacatgtgag        480

caaaaggcca gcaaaaggcc aggaaccgta aaaaggccgc gttgctggcg ttttttcgata       540

ggctccgccc ccctgacgag catcacaaaa atcgacgctc aagtcagagg tggcgaaacc       600

cgacaggact ataaagatac caggcgtttc cccctggaag ctccctcgtg cgctctcctg        660

taccgaccct gccgcttacc ggatacctgt ccgcctttct cccttcggga agcgtggcgc        720

tttctcatag ctcacgctgt aggtatctca gttcggtgta ggtcgttcgc tccaagctgg        780

gctgtgtgca cgaacccccc gttcagcccg accgctgcgc cttatccggt aactatcgtc        840

ttgagaccaa cccggtaaga cacgacttat cgccactggc agcagccact ggtaacagga        900

ttagcagagc gaggtatgta ggcggtgcta cagagttctt gaagtggtgg cctaactacg        960
```

9

```
gctacactag aaggacagta tttggtatct gcgctctgct gaagccagtt accttcggaa   1020

aaagagttgg tagctcttga tccggcaaac aaaccaccgc tggtagcggt ggttttttg   1080

tttgcaagca gcagattacg cgcagaaaaa aaggatctca agaagatcct ttgatctttt   1140

ctacggggtc tgacgctcag tggaacgaaa actcacgtta agggattttg gtcatgagat   1200

tatcaaaaag gatcttcacc tagatccttt taaattaaaa atgaagtttt aaatcaatct   1260

aaagtatata tgagtaaact tggtctgaca gttaccaatg cttaatcagt gaggcaccta   1320

tctcagcgat ctgtctattt cgttcatcca tagttgcctg actccccgtc gtgtagataa   1380

ctacgatacg ggagggctta ccatctggcc ccagtgctgc aatgataccg cgagacccac   1440

gctcaccggc tccagattta tcagcaataa accagccagc cggaagggcc gagcgcagaa   1500

gtggtcctgc aactttatcc gcctccatcc agtctattaa ttgttgccgg gaagctagag   1560

taagtagttc gccagttaat agtttgcgca acgttgttgg cattgctaca ggcatcgtgg   1620

tgtcacgctc gtcgtttggt atggcttcat tcagctccgg ttcccaacga tcaaggcgag   1680

ttacatgatc ccccatgttg tgcaaaaaag cggttagctc cttcggtcct ccgatcgttg   1740

tcagaagtaa gttggccgca gtgttatcac tcatggttat ggcagcactg cataattctc   1800

ttactgtcat gccatccgta agatgctttt ctgtgactgg tgagtactca accaagtcat   1860

tctgagaata gtgtatgcgg cgaccgagtt gctcttgccc ggcgtcaata cgggataata   1920

ccgcgccaca tagcagaact ttaaaagtgc tcatcattgg aaaacgttct tcggggcgaa   1980

aactctcaag gatcttaccg ctgttgagat ccagttcgat gtaacccact cgtgcaccca   2040

actgatcttc agcatctttt actttcacca gcgtttctgg gtgagcaaaa acaggaaggc   2100

aaaatgccgc aaaaaaggga ataagggcga cacggaaatg ttgaatactc atactcttcc   2160

tttttcaata ttattgaagc atttatcagg gttattgtct catgagcgga tacatatttg   2220

aatgtattta gaaaaataaa caaatagggg ttccgcgcac atttccccga aaagtgccac   2280

ctgacgtcta agaaaccatt attatcatga cattaaccta taaaaatagg cgtatcacga   2340

ggccctttcg tctcgcgcgt ttcggtgatg acggtgaaaa cctctgacac atgcagctcc   2400

cggagacggt cacagcttgt ctgtaagcgg atgccgggag cagacaagcc cgtcagggcg   2460

cgtcagcggg tgttggcggg tgtcggggct ggcttaacta tgcggcatca gagcagattg   2520

tactgagagt gcaccatatg cggtgtgaaa taccgcacag atgcgtaagg agaaaatacc   2580
```

10

gcatcaggcg ccattcgcca ttcaggctgc gcaactgttg ggaagggcga tcggtgcggg   2640

cctcttcgct attacgccag ctggcgaaag ggggatgtgc tgcaaggcga ttaagttggg   2700

taacgccagg gttttcccag tcacgacgtt gtaaaacgac ggccagtgaa ttgtaatacg   2760

actcactata   2770

<210> 23
<211> 54
<212> DNA
<213> Artificial

<220>
<223> oligonucleotide with homology to bacterial cloning vector

<400> 23
gcggccgcga ggagtatgga tccgactcga gtcggatcct ggctcctcgt cgac   54

<210> 24
<211> 26
<212> DNA
<213> Artificial

<220>
<223> oligonucleotide with homology to bacterial cloning vector

<400> 24
gcggccgcga ggagtatgga tccgac   26

<210> 25
<211> 24
<212> DNA
<213> Artificial

<220>
<223> oligonucleotide with homology to bacterial cloning vector

<400> 25
gtcggatcct ggctcctcgt cgac   24

<210> 26
<211> 10
<212> DNA
<213> mammalian

<220>
<221> polyA_site
<222> (1)..(10)

11

```
<400>  26
aaaaaaaaaa                                                                              10


<210>  27
<211>  54
<212>  DNA
<213>  Artificial

<220>
<223>  oligonucleotide with homology to bacterial cloning vector

<400>  27
gcgcggcgct cctcatacct aggctgagct cagcctagga ccgaggagca gctg          54


<210>  28
<211>  26
<212>  DNA
<213>  Artificial

<220>
<223>  oligonucleotide with homology to bacterial cloning vector

<400>  28
cgccggcgct cctcatacct aggctg                                          26


<210>  29
<211>  24
<212>  DNA
<213>  Artificial

<220>
<223>  oligonucleotide with homology to bacterial cloning vector

<400>  29
cagcctagga ccgaggagca gctg                                            24
```